



Site Information

Closure Report

Running Buffalo 1 Federal Com 001H (08.27.2021)

Eddy County, New Mexico

Unit I, S1, T21S, R28E

Incident #: NAPP2129344498

32.507372°, -104.035581°

Crude Oil Release

Source: Gasket failure at the Free Water Knockout

Release Date: 08/27/2021

Volume Released: 4 bbls/Crude Oil

Volume Recovered: 0 bbls/Crude Oil

Prepared for:

Concho Operating, LLC

15 West London Rd

Loving, NM 88256

Prepared by:

NTG Environmental

701 Tradewinds Blvd

Suite C

Midland, TX 79706



TABLE OF CONTENTS

FIGURES

FIGURE 1	OVERVIEW MAP
FIGURE 2	TOPOGRAPHIC MAP
FIGURE 3	EXCAVATION DEPTH MAP

TABLES/PHOTOLOG

TABLE 1	REMEDIAION SOIL ANALYTICAL RESULTS
PHOTOS	PHOTOLOG

APPENDICES

APPENDIX A	C-141 INITIAL AND FINAL
APPENDIX B	GROUNDWATER RESEARCH
APPENDIX C	LABORATORY ANALYTICAL REPORTS



701 Tradewinds Boulevard, Suite C
Midland, Texas 79706
Tel. 432.685.3898
www.ntglobal.com

December 30, 2021

Mike Bratcher
District Supervisor
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

Re: Closure Report
Running Buffalo 1 Federal Com 001H (08.27.21)
Concho Operating, LLC
Site Location: Unit I, S1, T21S, R28E
(Lat 32.507372°, Long , -104.035581°)
Eddy County, New Mexico

Mr. Bratcher:

On behalf of Concho Operating, LLC (COG), New Tech Global Environmental, LLC (NTGE) has prepared this letter to document site assessment and remediation activities for the Running Buffalo 1 Federal Com 001H (08.27.21). The site is located at 32.507372°, -104.035581° within Unit I, S1, T21S, R28E, and approximately 12.87 miles Northeast of Carlsbad, New Mexico in Eddy County (Figures 1 and 2).

Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the leak was discovered on August 27, 2021, due to a gasket failing at the free water knockout. It resulted in the release of approximately four (4) barrels of crude oil, and zero (0) barrels were recovered. The impacted area measured approximately 80' x 45', as shown on Figure 3. The initial C-141 form is attached in Appendix A.

Site Characterization

The site is located within a medium karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, no known water sources are within a 0.50-mile radius of the location. The closest well is located approximately 1.33 miles South of the site in S12, T21S, R28E. The well has a reported depth to groundwater of 205' below ground surface (bgs). A copy of the associated USGS – National Water Information System report is attached in Appendix B.

Regulatory Criteria

In accordance with the NMOCD regulatory criteria established in 19.15.29.12 NMAC, the following criteria were utilized in assessing the site.

- Benzene: 10 milligrams per kilogram (mg/kg).
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg.

- TPH: 100 mg/kg (GRO + DRO + MRO).
- Chloride 600 mg/kg

Remediation Activities and Confirmation Sampling

New Tech Global Environmental personnel were onsite from December 15-16, 2021, supervising the remediation activities and collecting confirmation samples. The areas of CS-1 through CS-18 were excavated to a depth of 0.5-1.0' below ground surface.

A total of eighteen (18) confirmation samples were collected (CS-1 through CS-18), and four (4) sidewall samples (SW-1 through SW-4) were collected every 200 square feet to ensure proper removal of the contaminated soils. All collected samples were analyzed at Cardinal Laboratories in Hobbs, New Mexico. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015 modified benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, and chloride by EPA method 4500. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The excavation depths and confirmation sample locations are shown in Figure 3.

The areas of CS-10, CS-11, CS-13, CS-14, and CS-15 showed high TPH concentrations ranging from 102 mg/kg to 246 mg/kg at 0.5' bgs. The confirmation samples were re-collected after further excavating an additional 0.5'. All final confirmation samples were below 19.15.29.12 NMAC criteria.

Once the remediation activities were completed, the excavated areas were backfilled with clean material to surface grade. Approximately 120 cubic yards of material were excavated and transported offsite for proper disposal.

Conclusions

Based on the assessment finding and the analytical results, no further actions are required at the site. The final C-141 is attached, and COG formally requests closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-0263.

Sincerely,
NTG Environmental



Mike Carmona
Senior Project Manager

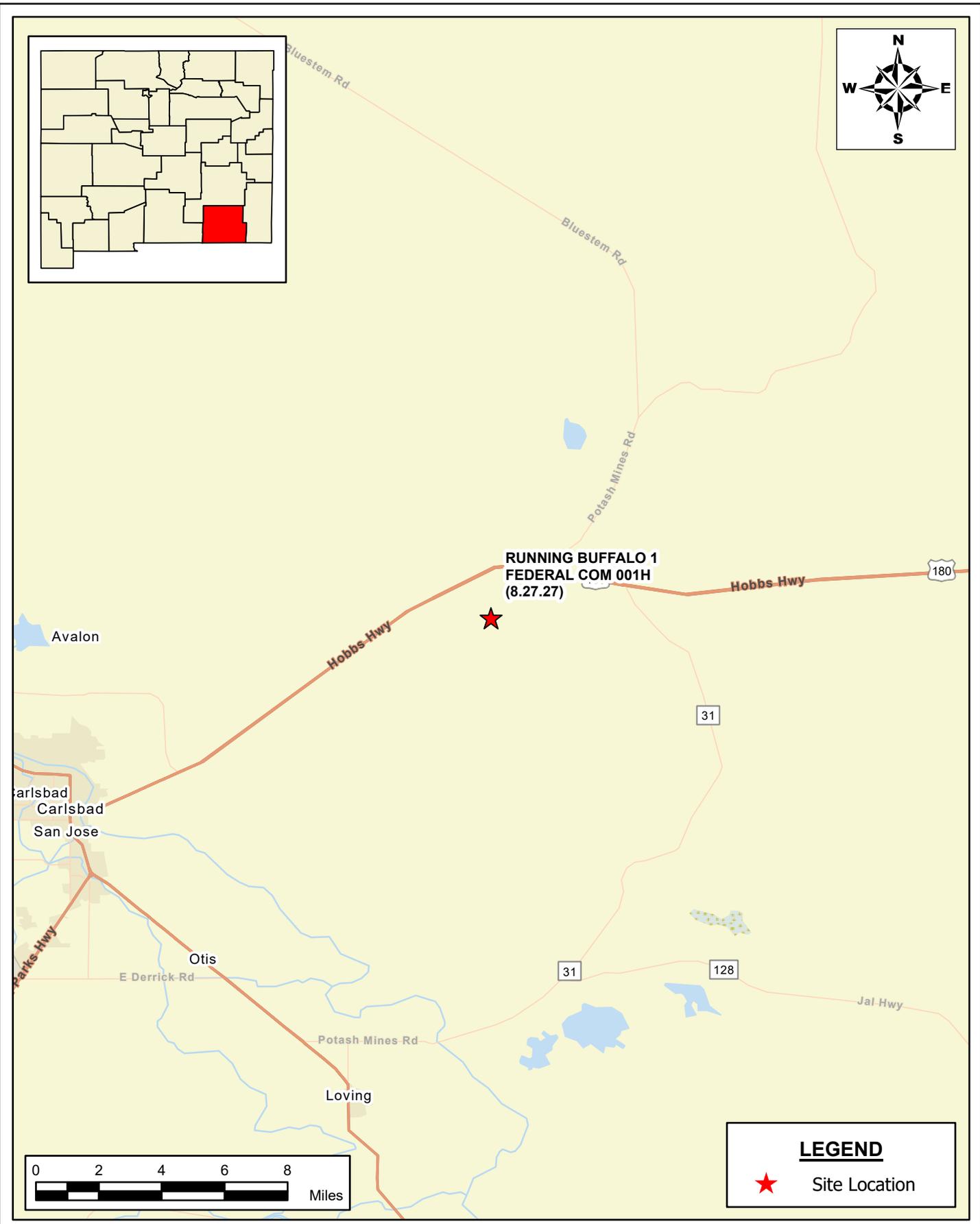


Conner Moehring
Project Manager



Figures

Document Path: P:\2021 PROJECTS\COGRSC\214818 - Running Buffalo 1 Federal Com 001H (8.27.21)\7 - Figures\GIS\Geodatabase\Running Buffalo 1 Federal Com 001H (8.27.21) Figures\123.aprx



SITE LOCATION MAP
COG OPERATING, LLC
 RUNNING BUFFALO 1 FEDERAL COM 001H (8.27.27)
 EDDY COUNTY, NEW MEXICO
 32.507372, -104.035581

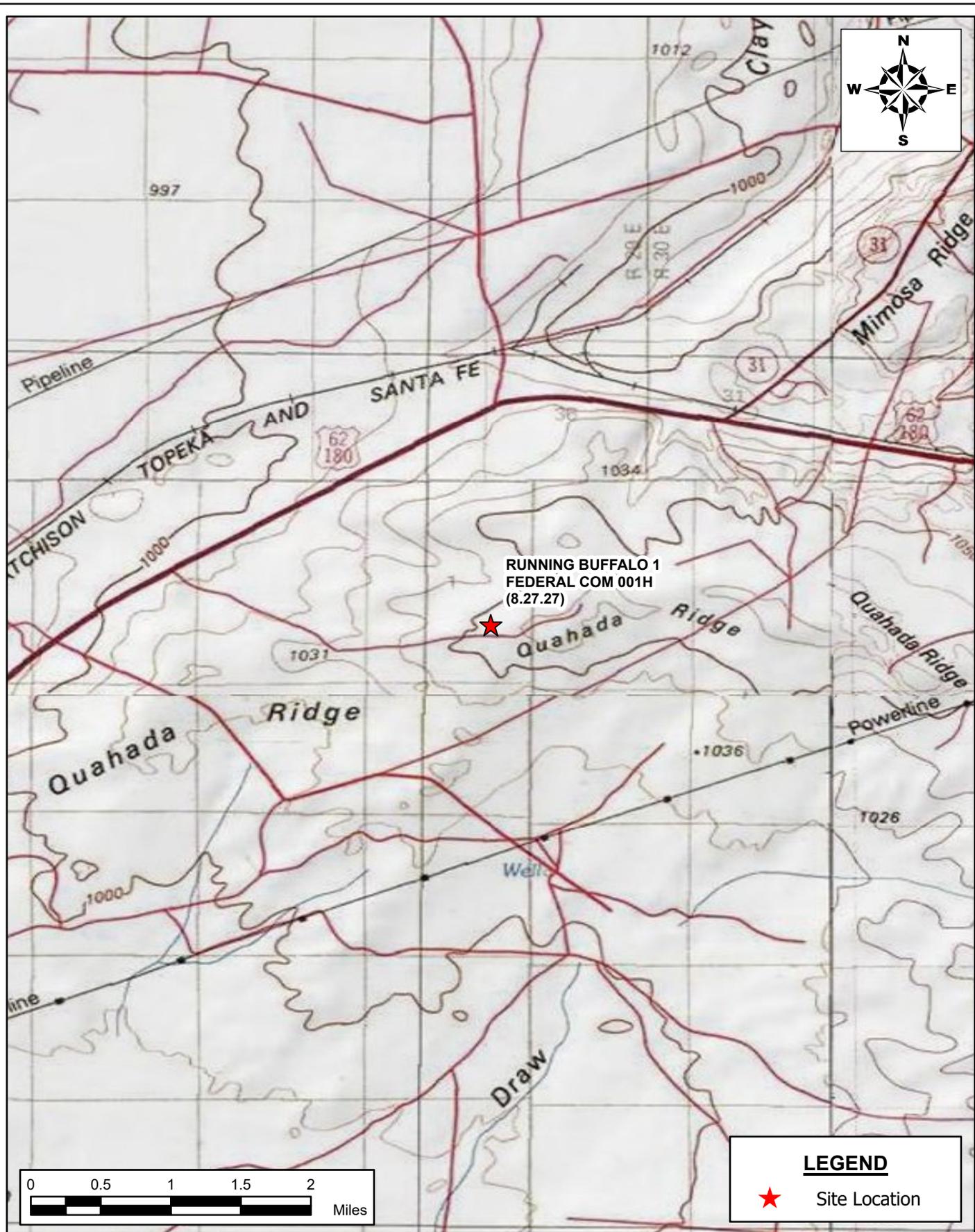
 **NTG ENVIRONMENTAL**
New Tech Global Environmental, LLC
 911 Regional Park Drive
 Houston, Texas 77060
 T - 281.872.9300
 F - 281.872.4521
 Web: www.ntglobal.com

NOTES:
 1. Base Image: ESRI Maps & Data 2013
 2. Map Projection: NAD 1983 UTM Zone 13N

DRAWING NUMBER:
FIGURE 1
 SHEET NUMBER:
1 of 1

SCALE: As Shown Date: 12/28/2021 PROJECT #: 214818

Document Path: P:\2021 PROJECTS\COGRSC\214818 - Running Buffalo 1 Federal Com 001H (8.27.21)\7 - Figures\GIS\Geodatabase\Running Buffalo 1 Federal Com 001H (8.27.21) Figures\23.aprx



LEGEND

★ Site Location

AREA MAP
COG OPERATING, LLC
 RUNNING BUFFALO 1 FEDERAL COM 001H (8.27.27)
 EDDY COUNTY, NEW MEXICO
 32.507372, -104.035581

SCALE: As Shown Date: 12/28/2021 PROJECT #: 214818

NTG ENVIRONMENTAL

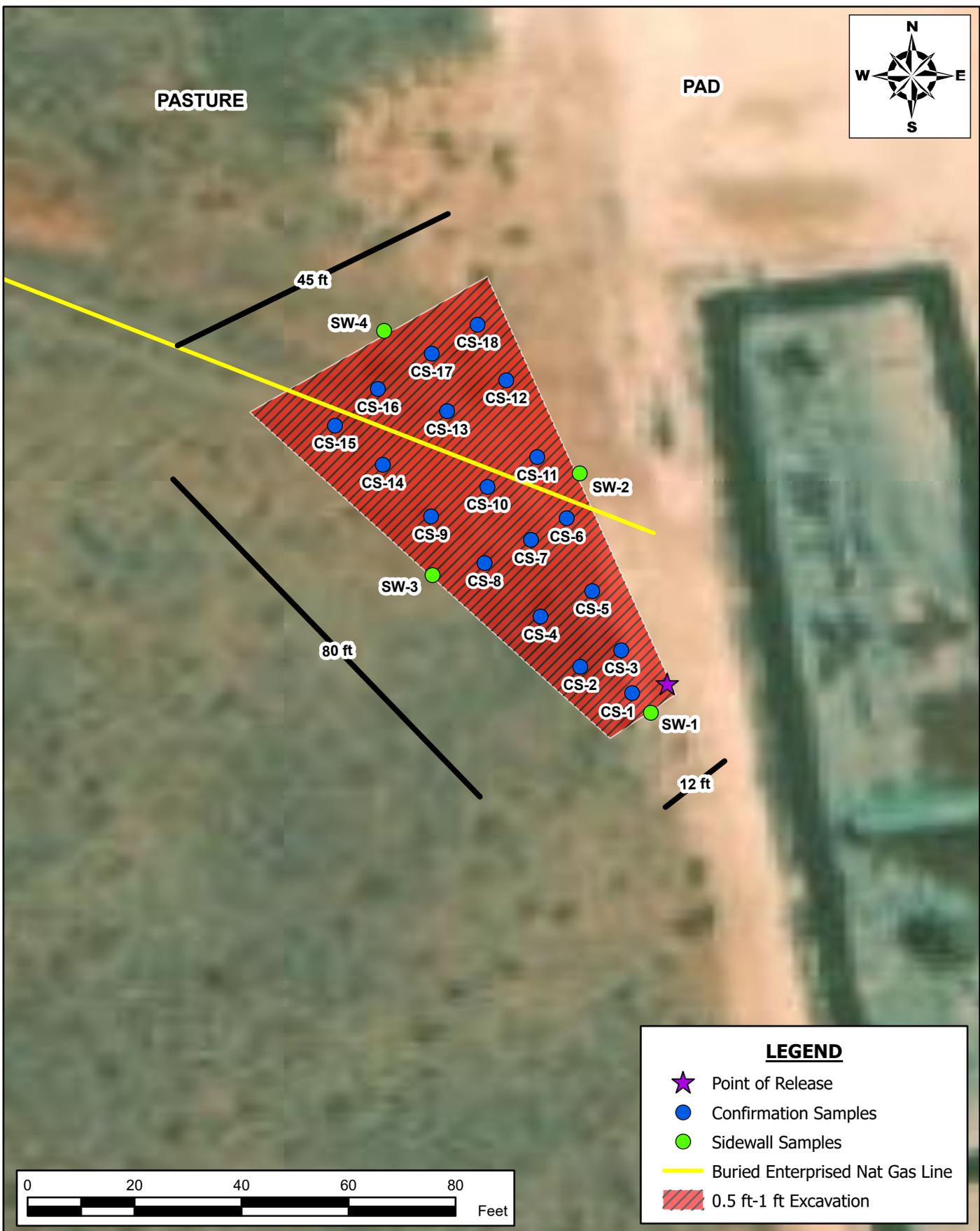
New Tech Global Environmental, LLC
 911 Regional Park Drive
 Houston, Texas 77060
 T - 281.872.9300
 F - 281.872.4521
 Web: www.ntglobal.com

NOTES:

1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983 UTM Zone 13N

DRAWING NUMBER:
FIGURE 2
 SHEET NUMBER:
1 of 1

Document Path: P:\2021 PROJECTS\COGRSC\214818 - Running Buffalo 1 Federal Com 001H (8.27.21)\7 - Figures\GIS\Geodatabase\Running Buffalo 1 Federal Com 001H (8.27.21) Figure 4.aprx



EXCAVATION DEPTH MAP
COG OPERATING, LLC
 RUNNING BUFFALO 1 FEDERAL COM 001H (8.27.27)
 EDDY COUNTY, NEW MEXICO
 32.507372, -104.035581

SCALE: As Shown | Date: 12/28/2021 | PROJECT #: 214818

New Tech Global Environmental, LLC
 911 Regional Park Drive
 Houston, Texas 77060
 T - 281.872.9300
 F - 281.872.4521
 Web: www.ntglobal.com



NOTES:
 1. Base Image: ESRI Maps & Data 2013
 2. Map Projection: NAD 1983 UTM Zone 13N

DRAWING NUMBER:

FIGURE 3

SHEET NUMBER:

1 of 1



Tables

Table 2
Concho Operating, LLC
Running Buffalo 1 Federal Com 001H (08.27.21)
Eddy County, New Mexico

Sample ID	Date	Sample Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
CS-1	12/16/2021	0.5	<10.0	55.0	<10.0	55.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
CS-2	12/16/2021	0.5	<10.0	47.4	<10.0	47.4	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
CS-3	12/16/2021	0.5	<10.0	42.0	<10.0	42.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
CS-4	12/16/2021	0.5	<10.0	18.7	<10.0	18.7	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
CS-5	12/16/2021	0.5	<10.0	51.5	<10.0	51.5	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
CS-6	12/16/2021	0.5	<10.0	54.7	<10.0	54.7	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
CS-7	12/16/2021	0.5	<10.0	37.0	<10.0	37.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
CS-8	12/16/2021	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
CS-9	12/16/2021	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
CS-10	12/16/2021	0.5	<10.0	218	27.8	246	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
	12/21/2021	0.5-1.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
CS-11	12/16/2021	0.5	<10.0	108	<10.0	108	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
	12/21/2021	0.5-1.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
CS-12	12/16/2021	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
CS-13	12/16/2021	0.5	<10.0	95.4	14.3	110	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
	12/21/2021	0.5-1.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
CS-14	12/16/2021	0.5	<10.0	102	<10.0	102	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
	12/21/2021	0.5-1.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
CS-15	12/16/2021	0.5	<10.0	90.5	12.7	103	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
	12/21/2021	0.5-1.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
CS-16	12/16/2021	0.5	<10.0	57.6	<10.0	57.6	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
CS-17	12/16/2021	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
CS-18	12/16/2021	0.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
SW-1	12/16/2021	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
SW-2	12/16/2021	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
SW-3	12/16/2021	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
SW-4	12/16/2021	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
Regulatory Limits^A						100 mg/kg	10 mg/kg				50 mg/kg	600 mg/kg

- Removed

^A – Table 1 - 19.15.29 NMAC
 mg/kg - milligram per kilogram
 TPH- Total Petroleum Hydrocarbons
 ft-feet



Photo Log

PHOTOGRAPHIC LOG

COG Operating

Photograph No. 1

Facility: Running Buffalo 1 Federal Com 001H (08.27.21)

County: Eddy County, New Mexico

Description:
View Northwest, area of confirmation samples (1-18).



Photograph No. 2

Facility: Running Buffalo 1 Federal Com 001H (08.27.21)

County: Eddy County, New Mexico

Description:
View Northwest, area of confirmation samples (1-18).

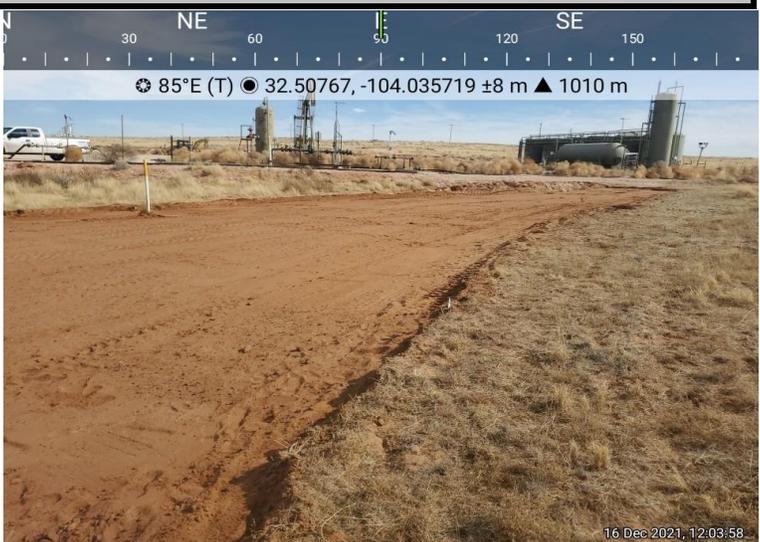


Photograph No. 3

Facility: Running Buffalo 1 Federal Com 001H (08.27.21)

County: Eddy County, New Mexico

Description:
View East, area of confirmation samples (1-18).





Appendix A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

Surface Owner: State Federal Tribal Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name _____ Title: _____ Signature: <u>Patricia Espinoza</u> _____ Date: _____ email: _____ Telephone: _____
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: Jaques Harris Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____
 Signature: Jaques Harris Date: _____
 email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Jennifer Nobui Date: _____
 Printed Name: _____ Title: _____



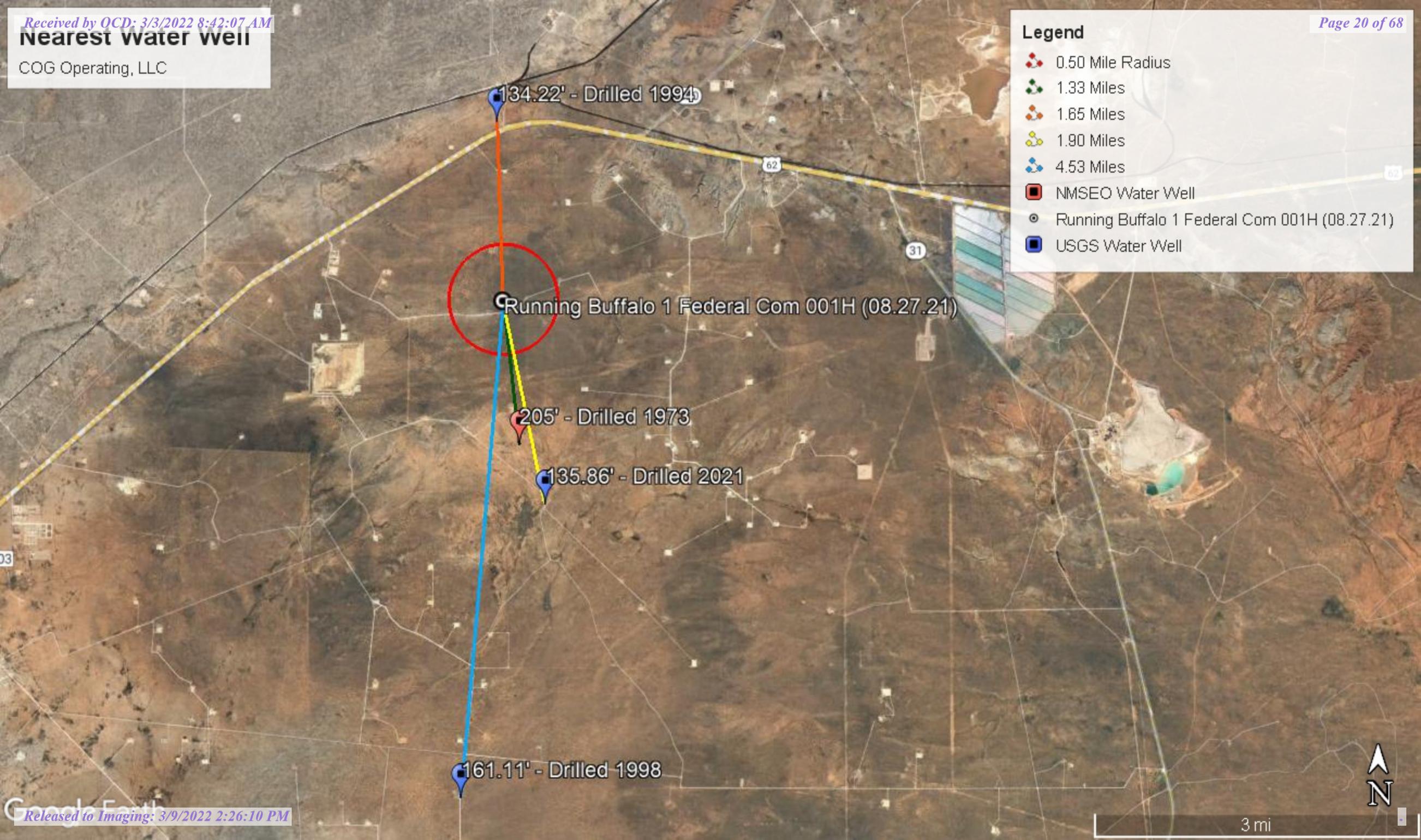
Appendix B

Nearest water well

COG Operating, LLC

Legend

-  0.50 Mile Radius
-  1.33 Miles
-  1.65 Miles
-  1.90 Miles
-  4.53 Miles
-  NMSEO Water Well
-  Running Buffalo 1 Federal Com 001H (08.27.21)
-  USGS Water Well



134.22' - Drilled 1994

Running Buffalo 1 Federal Com 001H (08.27.21)

205' - Drilled 1973

135.86' - Drilled 2021

161.11' - Drilled 1998



Medium Karst

COG Operating, LLC

Legend

-  MEDIUM
-  Running Buffalo 1 Federal Com 001H (08.27.21)

Running Buffalo 1 Federal Com 001H (08.27.21)



1000 ft



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00516	CP	ED	4	4	4	12	21S	28E	590901	3594984*		2121	275	205	70
C 04507 POD1	CUB	ED	4	2	3	08	21S	29E	593214	3595316		3122			

Average Depth to Water: **205 feet**

Minimum Depth: **205 feet**

Maximum Depth: **205 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 590643.71

Northing (Y): 3597089.78

Radius: 3200

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer Point of Diversion Summary

Well Tag	POD Number							
	CP 00516	Q64 Q16 Q4	Sec	Tws	Rng	X	Y	
		4 4 4	12	21S	28E	590901	3594984*	

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Driller License: 46	Driller Company: ABBOTT BROTHERS COMPANY	
Driller Name: ABBOTT, MURRELL		
Drill Start Date: 05/30/1973	Drill Finish Date: 06/06/1973	Plug Date:
Log File Date: 06/14/1973	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield:
Casing Size: 7.00	Depth Well: 275 feet	Depth Water: 205 feet

Water Bearing Stratifications:	Top	Bottom	Description
	260	275	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	253	275

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

10/27/21 10:48 AM

POINT OF DIVERSION SUMMARY




[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources Data Category: Groundwater Geographic Area: New Mexico

Click to hide News Bulletins

- Explore the [NEW USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#) 

Groundwater levels for New Mexico

Click to hide state-specific text

! Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs
 site_no list =

- 323154104021101

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 323154104021101 20S.29E.35.244441

Eddy County, New Mexico
 Latitude 32°31'54", Longitude 104°02'11" NAD27
 Land-surface elevation 3,336 feet above NAVD88
 The depth of the well is 339 feet below land surface.
 This well is completed in the Other aquifers (N9999OTHER) national aquifer.
 This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measurement	Water-level approval status
1984-07-18			D	62610	3197.67	NGVD29	1	Z			A
1984-07-18			D	62611	3199.24	NAVD88	1	Z			A
1984-07-18			D	72019	136.76		1	Z			A
1994-03-02			D	62610	3200.21	NGVD29	1	S			A
1994-03-02			D	62611	3201.78	NAVD88	1	S			A
1994-03-02			D	72019	134.22		1	S			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions about sites/data?](#)
[Feedback on this web site](#)
[Automated retrievals](#)
[Help](#)
[Data Tips](#)
[Explanation of terms](#)
[Subscribe for system changes](#)
[News](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)



Title: Groundwater for New Mexico: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>

Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2021-10-27 13:06:54 EDT

0.28 0.25 nadww01



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: New Mexico GO

Click to hide News Bulletins

- Explore the [NEW USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs
site_no list = 322850104014201

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 322850104014201 21S.29E.18.13320

Eddy County, New Mexico
Latitude 32°28'50", Longitude 104°01'42" NAD27
Land-surface elevation 3,289 feet above NAVD88
The depth of the well is 160 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measurement	Water-level approval status
1948-12-30			D 62610		3152.26	NGVD29	1	Z			A
1948-12-30			D 62611		3153.88	NAVD88	1	Z			A
1948-12-30			D 72019	135.12			1	Z			A
1983-02-17			D 62610		3153.59	NGVD29	1	Z			A
1983-02-17			D 62611		3155.21	NAVD88	1	Z			A
1983-02-17			D 72019	133.79			1	Z			A
1987-10-15			D 62610		3152.48	NGVD29	1	Z			A
1987-10-15			D 62611		3154.10	NAVD88	1	Z			A
1987-10-15			D 72019	134.90			1	Z			A
1992-12-10			D 62610		3154.45	NGVD29	1	S			A
1992-12-10			D 62611		3156.07	NAVD88	1	S			A
1992-12-10			D 72019	132.93			1	S			A
1998-01-27			D 62610		3150.21	NGVD29	1	S			A
1998-01-27			D 62611		3151.83	NAVD88	1	S			A
1998-01-27			D 72019	137.17			1	S			A
2015-12-16	23:40 UTC		m 62610		3153.24	NGVD29	1	S	USGS	S	A
2015-12-16	23:40 UTC		m 62611		3154.86	NAVD88	1	S	USGS	S	A
2015-12-16	23:40 UTC		m 72019	134.14			1	S	USGS	S	A
2021-02-23	18:00 UTC		m 62610		3151.52	NGVD29	1	S	USGS	S	A
2021-02-23	18:00 UTC		m 62611		3153.14	NAVD88	1	S	USGS	S	A
2021-02-23	18:00 UTC		m 72019	135.86			1	S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

- [Questions about sites/data?](#)
- [Feedback on this web site](#)
- [Automated retrievals](#)
- [Help](#)
- [Data Tips](#)
- [Explanation of terms](#)
- [Subscribe for system changes](#)
- [News](#)

[Accessibility](#)
 [FOIA](#)
 [Privacy](#)
 [Policies and Notices](#)

[U.S. Department of the Interior](#) |
 [U.S. Geological Survey](#)

Title: Groundwater for New Mexico: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>



Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2021-10-27 13:03:45 EDT

0.34 0.29 nadww02




[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources Data Category: Groundwater Geographic Area: New Mexico

Click to hide News Bulletins

- Explore the [NEW USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

! Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs
 site_no list =

- 322632104023001

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 322632104023001 21S.28E.36.12321

Eddy County, New Mexico
 Latitude 32°26'32", Longitude 104°02'30" NAD27
 Land-surface elevation 3,200 feet above NAVD88
 The depth of the well is 241 feet below land surface.
 This well is completed in the Other aquifers (N9999OTHER) national aquifer.
 This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measurement	Water-level approval status
1976-12-07		D	62610		3037.77	NGVD29	1	Z			A
1976-12-07		D	62611		3039.37	NAVD88	1	Z			A
1976-12-07		D	72019	160.63			1	Z			A
1978-01-05		D	62610		3037.64	NGVD29	1	Z			A
1978-01-05		D	62611		3039.24	NAVD88	1	Z			A
1978-01-05		D	72019	160.76			1	Z			A
1983-01-20		D	62610		3037.60	NGVD29	1	Z			A
1983-01-20		D	62611		3039.20	NAVD88	1	Z			A
1983-01-20		D	72019	160.80			1	Z			A
1987-10-15		D	62610		3037.33	NGVD29	1	Z			A
1987-10-15		D	62611		3038.93	NAVD88	1	Z			A
1987-10-15		D	72019	161.07			1	Z			A
1992-12-10		D	62610		3037.62	NGVD29	3	S			A
1992-12-10		D	62611		3039.22	NAVD88	3	S			A
1992-12-10		D	72019	160.78			3	S			A
1998-01-27		D	62610		3037.29	NGVD29	1	S			A
1998-01-27		D	62611		3038.89	NAVD88	1	S			A
1998-01-27		D	72019	161.11			1	S			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet

Section	Code	Description
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	3	True value is above reported value due to local conditions
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

- [Questions about sites/data?](#)
- [Feedback on this web site](#)
- [Automated retrievals](#)
- [Help](#)
- [Data Tips](#)
- [Explanation of terms](#)
- [Subscribe for system changes](#)
- [News](#)

[Accessibility](#)
 [FOIA](#)
 [Privacy](#)
 [Policies and Notices](#)

[U.S. Department of the Interior](#) |
 [U.S. Geological Survey](#)

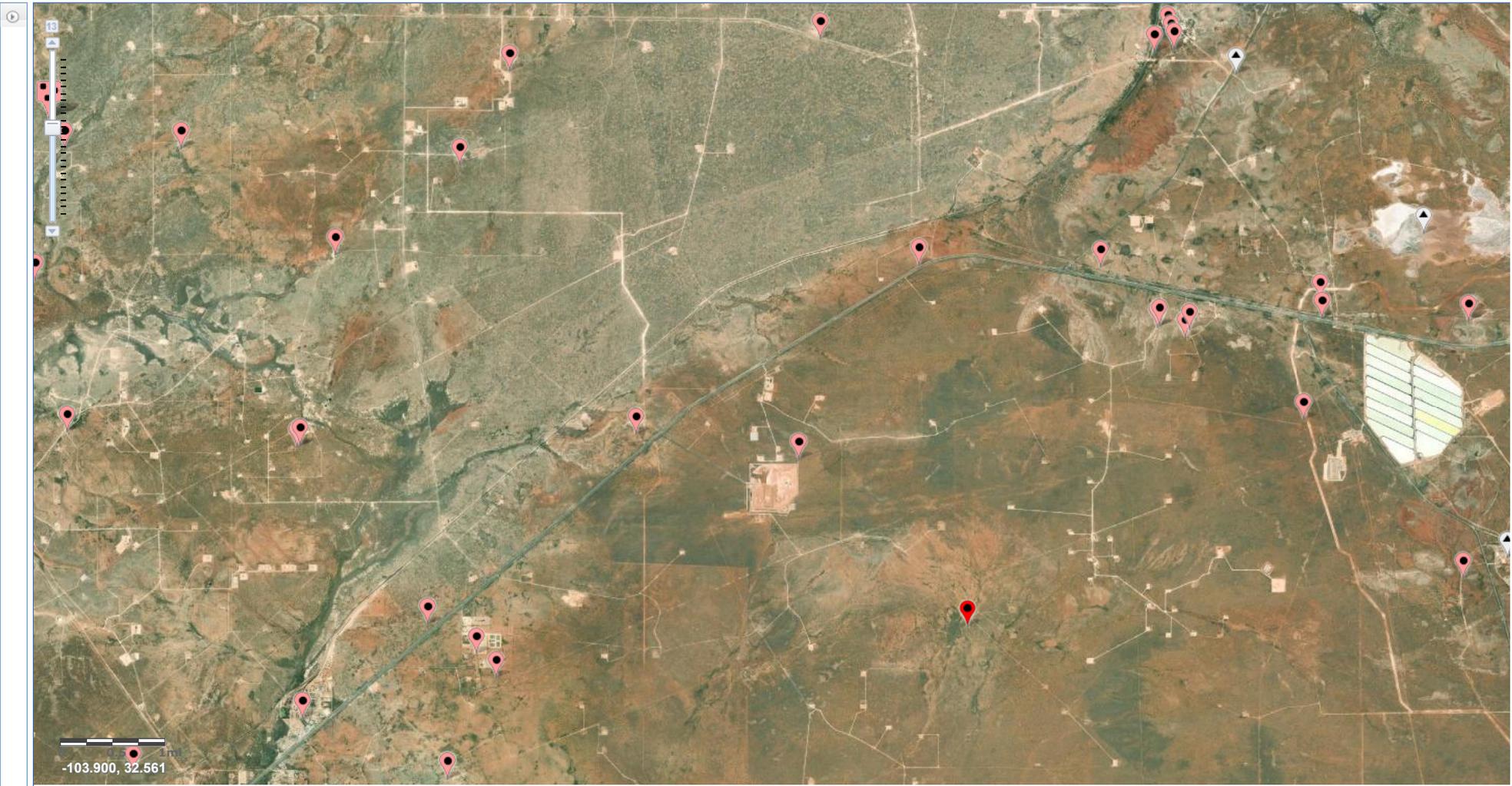
Title: Groundwater for New Mexico: Water Levels
URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>



Page Contact Information: [New Mexico Water Data Maintainer](#)
 Page Last Modified: 2021-10-27 12:58:25 EDT
 0.29 0.26 nadww02

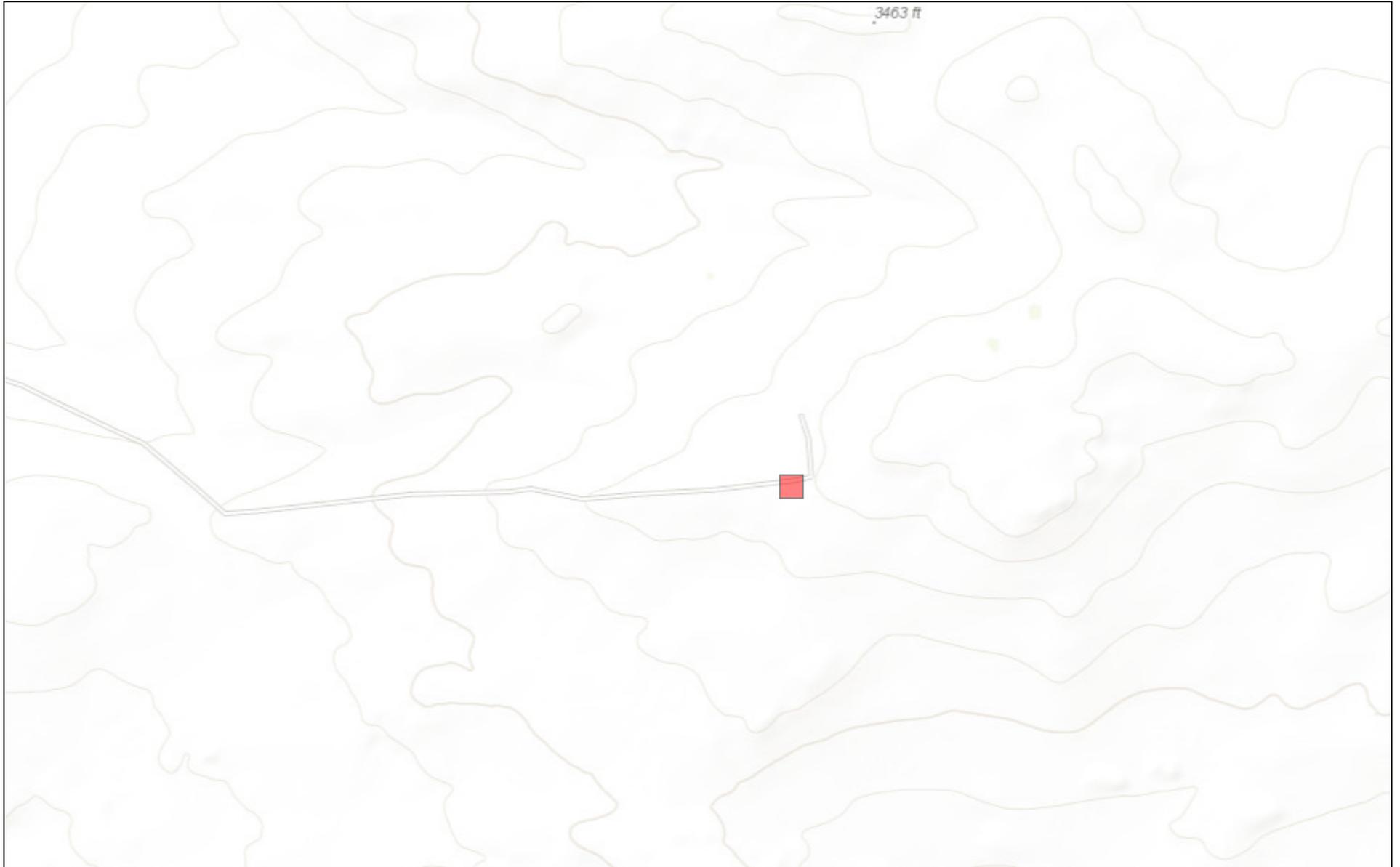


National Water Information System: Mapper

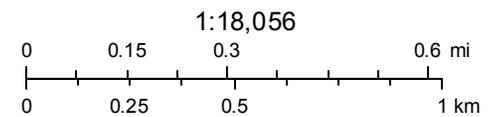


Site Information

New Mexico NFHL Data



October 27, 2021



FEMA
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,



Appendix C



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 21, 2021

MIKE CARMONA
NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND, TX 79706

RE: RUNNING BUFFALO 1 FED COM 001H

Enclosed are the results of analyses for samples received by the laboratory on 12/16/21 13:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene
Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 1 (0.5') (H213637-01)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.11	105	2.00	1.12	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	99.8	2.00	1.05	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	1.29	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.21	103	6.00	1.49	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.8 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	220	110	200	3.08	
DRO >C10-C28*	55.0	10.0	12/17/2021	ND	226	113	200	1.10	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 70.3 % 62-130

Surrogate: 1-Chlorooctadecane 77.1 % 54.5-135

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 2 (0.5') (H213637-02)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.11	105	2.00	1.12	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	99.8	2.00	1.05	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	1.29	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.21	103	6.00	1.49	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.1 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	220	110	200	3.08	
DRO >C10-C28*	47.4	10.0	12/17/2021	ND	226	113	200	1.10	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 84.7 % 62-130

Surrogate: 1-Chlorooctadecane 88.5 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 3 (0.5') (H213637-03)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.11	105	2.00	1.12	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	99.8	2.00	1.05	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	1.29	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.21	103	6.00	1.49	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.7 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	220	110	200	3.08	
DRO >C10-C28*	42.0	10.0	12/17/2021	ND	226	113	200	1.10	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 103 % 62-130

Surrogate: 1-Chlorooctadecane 107 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 4 (0.5') (H213637-04)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.11	105	2.00	1.12	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	99.8	2.00	1.05	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	1.29	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.21	103	6.00	1.49	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.9 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	220	110	200	3.08	
DRO >C10-C28*	18.7	10.0	12/17/2021	ND	226	113	200	1.10	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 80.7 % 62-130

Surrogate: 1-Chlorooctadecane 83.6 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 5 (0.5') (H213637-05)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.11	105	2.00	1.12	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	99.8	2.00	1.05	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	1.29	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.21	103	6.00	1.49	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.5 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	220	110	200	3.08	
DRO >C10-C28*	51.5	10.0	12/17/2021	ND	226	113	200	1.10	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 71.8 % 62-130

Surrogate: 1-Chlorooctadecane 77.7 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 6 (0.5') (H213637-06)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	220	110	200	3.08	
DRO >C10-C28*	54.7	10.0	12/17/2021	ND	226	113	200	1.10	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 77.3 % 62-130

Surrogate: 1-Chlorooctadecane 81.8 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 7 (0.5') (H213637-07)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354		
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60		
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35		
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04		
Total BTEX	<0.300	0.300	12/17/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	12/17/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	12/18/2021	ND	220	110	200	3.08		
DRO >C10-C28*	37.0	10.0	12/18/2021	ND	226	113	200	1.10		
EXT DRO >C28-C36	<10.0	10.0	12/18/2021	ND						

Surrogate: 1-Chlorooctane 91.4 % 62-130

Surrogate: 1-Chlorooctadecane 93.5 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 8 (0.5') (H213637-08)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/18/2021	ND	220	110	200	3.08	
DRO >C10-C28*	<10.0	10.0	12/18/2021	ND	226	113	200	1.10	
EXT DRO >C28-C36	<10.0	10.0	12/18/2021	ND					

Surrogate: 1-Chlorooctane 80.8 % 62-130

Surrogate: 1-Chlorooctadecane 80.2 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 9 (0.5') (H213637-09)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	<10.0	10.0	12/17/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 68.1 % 62-130

Surrogate: 1-Chlorooctadecane 63.4 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 10 (0.5') (H213637-10)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 117 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	218	10.0	12/17/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	27.8	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 64.5 % 62-130

Surrogate: 1-Chlorooctadecane 67.8 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 11 (0.5') (H213637-11)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/20/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	108	10.0	12/20/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/20/2021	ND					

Surrogate: 1-Chlorooctane 90.5 % 62-130

Surrogate: 1-Chlorooctadecane 96.3 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 12 (0.5') (H213637-12)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	<10.0	10.0	12/17/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 65.3 % 62-130

Surrogate: 1-Chlorooctadecane 60.8 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 13 (0.5') (H213637-13)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354		
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60		
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35		
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04		
Total BTEX	<0.300	0.300	12/17/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/17/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	191	95.5	200	3.20		
DRO >C10-C28*	95.4	10.0	12/17/2021	ND	189	94.7	200	1.07		
EXT DRO >C28-C36	14.3	10.0	12/17/2021	ND						

Surrogate: 1-Chlorooctane 64.2 % 62-130

Surrogate: 1-Chlorooctadecane 63.7 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 14 (0.5') (H213637-14)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/20/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	102	10.0	12/20/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/20/2021	ND					

Surrogate: 1-Chlorooctane 88.8 % 62-130

Surrogate: 1-Chlorooctadecane 94.6 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 15 (0.5') (H213637-15)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	90.5	10.0	12/17/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	12.7	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 64.7 % 62-130

Surrogate: 1-Chlorooctadecane 64.2 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 16 (0.5') (H213637-16)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	57.6	10.0	12/17/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 65.9 % 62-130

Surrogate: 1-Chlorooctadecane 63.2 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 17 (0.5') (H213637-17)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	12/17/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	<10.0	10.0	12/17/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 62.4 % 62-130

Surrogate: 1-Chlorooctadecane 58.8 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 18 (0.5') (H213637-18)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/17/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	<10.0	10.0	12/17/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 63.8 % 62-130

Surrogate: 1-Chlorooctadecane 60.0 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: SW - 1 (H213637-19)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354		
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60		
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35		
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04		
Total BTEX	<0.300	0.300	12/17/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/17/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	12/21/2021	ND	191	95.5	200	3.20		
DRO >C10-C28*	<10.0	10.0	12/21/2021	ND	189	94.7	200	1.07		
EXT DRO >C28-C36	<10.0	10.0	12/21/2021	ND						

Surrogate: 1-Chlorooctane 103 % 62-130

Surrogate: 1-Chlorooctadecane 103 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: SW - 2 (H213637-20)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/17/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	<10.0	10.0	12/17/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 62.7 % 62-130

Surrogate: 1-Chlorooctadecane 58.8 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: SW - 3 (H213637-21)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/17/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	<10.0	10.0	12/17/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 65.2 % 62-130

Surrogate: 1-Chlorooctadecane 59.8 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/16/2021	Sampling Date:	12/16/2021
Reported:	12/21/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: SW - 4 (H213637-22)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2021	ND	2.05	102	2.00	0.354	
Toluene*	<0.050	0.050	12/17/2021	ND	2.00	100	2.00	8.60	
Ethylbenzene*	<0.050	0.050	12/17/2021	ND	2.03	101	2.00	8.35	
Total Xylenes*	<0.150	0.150	12/17/2021	ND	6.71	112	6.00	7.04	
Total BTEX	<0.300	0.300	12/17/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/17/2021	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2021	ND	191	95.5	200	3.20	
DRO >C10-C28*	<10.0	10.0	12/17/2021	ND	189	94.7	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/17/2021	ND					

Surrogate: 1-Chlorooctane 63.7 % 62-130

Surrogate: 1-Chlorooctadecane 57.6 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- BS-3 Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



Chain of Custody

Work Order No: H213637

Page 1 of 3

Project Manager:	Mike Carmona	Bill to: (if different)	Jacqui Harris
Company Name:	NTG Environmental	Company Name:	COG
Address:	701 Tradewinds BLVD	Address:	15 W Loving Rd
City, State ZIP:	Midland, TX 79706	City, State ZIP:	Loving, NM 88256
Phone:	432-813-1992	Email:	jacquiharris@conocophillips.com / 432-312-7736

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other: _____

Project Name:		Turn Around		ANALYSIS REQUEST										Preservative Codes				
Running Buffalo 1 Fed Com 001H (8.27.21)		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		Pres. Code												None: NO	DI Water: H ₂ O	
Project Number:	214818	Due Date:		Parameters BTEX 8021B TPH 8015M (GRO + DRO + MRO) Chloride 8000 4500												Cool: Cool	MeOH: Me	
Project Location:	Eddy Co, NM	TAT starts the day received by the lab, if received by 4:30pm															HCL: HC	HNO ₃ : HN
Sampler's Name:	CM																H ₂ SO ₄ : H ₂	NaOH: Na
PO #:																	H ₃ PO ₄ : HP	
SAMPLE RECEIPT		Temp Blank:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Wet Ice:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>												NaHSO ₄ : NABIS
Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:		113												Na ₂ S ₂ O ₃ : NaSO ₃		
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Correction Factor:		-0.50												Zn Acetate+NaOH: Zn		
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Temperature Reading:		6.30												NaOH+Ascorbic Acid: SAPC		
Total Containers:		Corrected Temperature:		5.80														
Sample Identification	Date	Time	Soil	Water	Grab/Comp	# of Cont											Sample Comments	
1 CS-1 (0.5')	12/16/2021		X		C	1	X	X	X									
2 CS-2 (0.5')	12/16/2021		X		C	1	X	X	X									
3 CS-3 (0.5')	12/16/2021		X		C	1	X	X	X									
4 CS-4 (0.5')	12/16/2021		X		C	1	X	X	X									
5 CS-5 (0.5')	12/16/2021		X		C	1	X	X	X									
6 CS-6 (0.5')	12/16/2021		X		C	1	X	X	X									
7 CS-7 (0.5')	12/16/2021		X		C	1	X	X	X									
8 CS-8 (0.5')	12/16/2021		X		C	1	X	X	X									
9 CS-9 (0.5')	12/16/2021		X		C	1	X	X	X									
10 CS-10 (0.5')	12/16/2021		X		C	1	X	X	X									

Additional Comments:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>Jamara [Signature]</i>	12-16-21 1355			



Chain of Custody

Work Order No: H21 3637

Page 2 of 3

Project Manager:	Mike Carmona	Bill to: (if different)	Jacqui Harris
Company Name:	NTG Environmental	Company Name:	COG
Address:	701 Tradewinds BLVD	Address:	15 W Loving Rd
City, State ZIP:	Midland, TX 79706	City, State ZIP:	Loving, NM 88256
Phone:	432-813-1992	Email:	jacquiharris@conocophillips.com / 432-312-7736

Work Order Comments	
Program: UST/PST	<input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> perfund <input type="checkbox"/>
State of Project:	
Reporting: Level II	<input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: EDD	<input type="checkbox"/> ADaPT <input type="checkbox"/> Other:

Project Name:		Turn Around		ANALYSIS REQUEST										Preservative Codes							
Project Number:		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		Pres. Code											None: NO						
Project Location:		Due Date:		Parameters											DI Water: H ₂ O						
Sampler's Name:		TAT starts the day received by the lab, if received by 4:30pm													Cool: Cool						
PO #:															MeOH: Me						
SAMPLE RECEIPT		Temp Blank:													HCL: HC						
Received Intact:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>													H ₂ SO ₄ : H ₂						
Cooler Custody Seals:		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		BTEX 8021B TPH 8015M (GRO + DRO + NIRO) Chloride 800.p. 4500											NaOH: Na						
Sample Custody Seals:		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A													H ₃ PO ₄ : HP						
Total Containers:		Corrected Temperature: <u>5.8°C</u>													NaHSO ₄ : NABIS						
															Na ₂ S ₂ O ₃ : NaSO ₃						
															Zn Acetate+NaOH: Zn						
														NaOH+Ascorbic Acid: SAPC							
Sample Identification		Date	Time	Soil	Water	Grab/Comp	# of Cont											Sample Comments			
11	CS-11 (0.5')	12/16/2021		X		C	1	X	X	X											
12	CS-12 (0.5')	12/16/2021		X		C	1	X	X	X											
13	CS-13 (0.5')	12/16/2021		X		C	1	X	X	X											
14	CS-14 (0.5')	12/16/2021		X		C	1	X	X	X											
15	CS-15 (0.5')	12/16/2021		X		C	1	X	X	X											
16	CS-16 (0.5')	12/16/2021		X		C	1	X	X	X											
17	CS-17 (0.5')	12/16/2021		X		C	1	X	X	X											
18	CS-18 (0.5')	12/16/2021		X		C	1	X	X	X											
19	SW-1	12/16/2021		X		C	1	X	X	X											
20	SW-2	12/16/2021		X		C	1	X	X	X											

Additional Comments:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>Juarez Alday</i>	12-16-21 1355	2		
3			4		
5			6		



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 22, 2021

MIKE CARMONA
NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND, TX 79706

RE: RUNNING BUFFALO 1 FED COM 001H

Enclosed are the results of analyses for samples received by the laboratory on 12/21/21 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene
Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/21/2021	Sampling Date:	12/21/2021
Reported:	12/22/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 10 (0.5' - 1.0') (H213688-01)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2021	ND	1.99	99.4	2.00	4.98	
Toluene*	<0.050	0.050	12/21/2021	ND	1.92	96.2	2.00	5.02	
Ethylbenzene*	<0.050	0.050	12/21/2021	ND	1.88	94.0	2.00	5.04	
Total Xylenes*	<0.150	0.150	12/21/2021	ND	5.75	95.9	6.00	4.04	
Total BTEX	<0.300	0.300	12/21/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.4 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/22/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/22/2021	ND	189	94.3	200	4.62	
DRO >C10-C28*	<10.0	10.0	12/22/2021	ND	214	107	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/22/2021	ND					

Surrogate: 1-Chlorooctane 85.1 % 62-130

Surrogate: 1-Chlorooctadecane 85.3 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/21/2021	Sampling Date:	12/21/2021
Reported:	12/22/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 11 (0.5' - 1.0') (H213688-02)

BTEX 8021B		mg/kg		Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/21/2021	ND	1.99	99.4	2.00	4.98		
Toluene*	<0.050	0.050	12/21/2021	ND	1.92	96.2	2.00	5.02		
Ethylbenzene*	<0.050	0.050	12/21/2021	ND	1.88	94.0	2.00	5.04		
Total Xylenes*	<0.150	0.150	12/21/2021	ND	5.75	95.9	6.00	4.04		
Total BTEX	<0.300	0.300	12/21/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.7 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/22/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	12/22/2021	ND	189	94.3	200	4.62		
DRO >C10-C28*	<10.0	10.0	12/22/2021	ND	214	107	200	1.07		
EXT DRO >C28-C36	<10.0	10.0	12/22/2021	ND						

Surrogate: 1-Chlorooctane 84.5 % 62-130

Surrogate: 1-Chlorooctadecane 83.5 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/21/2021	Sampling Date:	12/21/2021
Reported:	12/22/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 13 (0.5' - 1.0') (H213688-03)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2021	ND	1.99	99.4	2.00	4.98	
Toluene*	<0.050	0.050	12/21/2021	ND	1.92	96.2	2.00	5.02	
Ethylbenzene*	<0.050	0.050	12/21/2021	ND	1.88	94.0	2.00	5.04	
Total Xylenes*	<0.150	0.150	12/21/2021	ND	5.75	95.9	6.00	4.04	
Total BTEX	<0.300	0.300	12/21/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.2 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/22/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/22/2021	ND	189	94.3	200	4.62	
DRO >C10-C28*	<10.0	10.0	12/22/2021	ND	214	107	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/22/2021	ND					

Surrogate: 1-Chlorooctane 86.2 % 62-130

Surrogate: 1-Chlorooctadecane 84.1 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/21/2021	Sampling Date:	12/21/2021
Reported:	12/22/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 14 (0.5' - 1.0') (H213688-04)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2021	ND	1.99	99.4	2.00	4.98	
Toluene*	<0.050	0.050	12/21/2021	ND	1.92	96.2	2.00	5.02	
Ethylbenzene*	<0.050	0.050	12/21/2021	ND	1.88	94.0	2.00	5.04	
Total Xylenes*	<0.150	0.150	12/21/2021	ND	5.75	95.9	6.00	4.04	
Total BTEX	<0.300	0.300	12/21/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/22/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/22/2021	ND	189	94.3	200	4.62	
DRO >C10-C28*	<10.0	10.0	12/22/2021	ND	214	107	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/22/2021	ND					

Surrogate: 1-Chlorooctane 91.5 % 62-130

Surrogate: 1-Chlorooctadecane 90.7 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

NTG ENVIRONMENTAL
 MIKE CARMONA
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received:	12/21/2021	Sampling Date:	12/21/2021
Reported:	12/22/2021	Sampling Type:	Soil
Project Name:	RUNNING BUFFALO 1 FED COM 001H	Sampling Condition:	Cool & Intact
Project Number:	214818 (8.27.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: CS - 15 (0.5' - 1.0') (H213688-05)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2021	ND	1.99	99.4	2.00	4.98	
Toluene*	<0.050	0.050	12/21/2021	ND	1.92	96.2	2.00	5.02	
Ethylbenzene*	<0.050	0.050	12/21/2021	ND	1.88	94.0	2.00	5.04	
Total Xylenes*	<0.150	0.150	12/21/2021	ND	5.75	95.9	6.00	4.04	
Total BTEX	<0.300	0.300	12/21/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.6 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/22/2021	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/22/2021	ND	189	94.3	200	4.62	
DRO >C10-C28*	<10.0	10.0	12/22/2021	ND	214	107	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	12/22/2021	ND					

Surrogate: 1-Chlorooctane 87.8 % 62-130

Surrogate: 1-Chlorooctadecane 85.8 % 54.5-135

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS
 Action 85869

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 85869
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	None	3/9/2022